Amendments to the Specification:

Please replace the paragraph beginning on page 4, line 21, with the following rewritten paragraph (deleted text being struck through and added text being underlined):

As illustrated in Figures 1 through 3, the alcohol and drug sensor system for vehicles 10 generally comprises a main tube 12 extending from the dashboard 2 of a vehicle 4 or other structure near to the potential driver of the vehicle 4 such as the vehicle's frame, floor, seat or the like. The main tube 12 is connected to a sensor 14 for detecting the presence of intoxicants in the breath of a person blowing into the main tube 12. The sensor 14 is operationally coupled to a microprocessor 16. The ignition system 18 of the vehicle 4 is operationally coupled to the microprocessor 16 such that the ignition system 18 cannot be activated until a potential driver has blown into the main tube 12. If a level of intoxicants detected by the sensor 14 is over a pre-determined level, the microprocessor 16 will not activate the ignition system 18, thus preventing the vehicle 4 from being driven. If the level of intoxicants is below the pre-determined level, the microprocessor 16 activates a relay 20 to enable the ignition system 18 to permit the ignition system 18 to be used to start the engine of the vehicle 4. Most preferably, the microprocessor 16 is operationally coupled (for example, by wires 22) to a locking means 24 for physically preventing turning of an ignition key 26. The means 24 may be a conventionally known physical lock such as a solenoid 28 engaging the ignition key assembly 30 to prevent rotation of the ignition key 26.

Please replace the paragraph beginning on page 5, line 12, with the following rewritten paragraph (deleted text being struck through and added text being underlined):

The sensor 14 uses gas chromatography. The components of the sensor 14 are a carrier-gas supply and flow controller 32, a sample inlet tube 34, a chromatographic column 36, and a column oven 38. A breath sample is injected into the sample inlet tube 34 when the potential driver blows into the main tube 12. The sample is channeled through the carrier gas supply and flow controller 32 (see FIG. 2) into the column oven 38 to heat the sample. The elements of the breath sample are then distinguished using the retention time within the column 36. The sample leaves the column 36 and moves through an opening or hole 40 in a resistance measuring means positioned adjacent to the column 36 for measuring the electrical resistance of a fluid passing through the hole 40. The sample moves through [[[a]]] the hole 40 in the center 42 of a silicone wafer 44 of the resistance measuring means. Two thermal detectors 46 utilizing serpentine strands 48 of nickel wire with very low resistance are positioned near the hole 40 in the silicone wafer 44. The strands 48 of nickel wire are approximately 20 microns thick and one inch long. A wheatstone bridge 50 is attached to the detectors 46. When the elements of the breath sample pass through the hole 40, the resistance between the detectors 46 is measured. The changes in resistance are then used to determine the contents of the breath sample.